

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1 1-48. (Cancelled)

1 49. (Currently amended) A method for managing a database system,
2 comprising:

3 receiving a command to perform an administrative function involving a
4 user within the database system;

5 determining if the user is a sensitive user who is empowered to access
6 sensitive data in the database system;

7 if the user is not a sensitive user, and if the command is received from a
8 normal database administrator for the database system, allowing the
9 administrative function to proceed;

10 if the user is a sensitive user, and if the command is received from a
11 normal database administrator, disallowing-preventing the normal database
12 administrator from performing the administrative function involving the sensitive
13 user; and

14 if the user is a sensitive user, and if the command is received from a
15 security officer who is the only database administrator empowered to perform
16 administrative functions for functions involving sensitive users, allowing
17 performing the administrative function to proceed.

1 50. (Original) The method of claim 49, further comprising:

2 receiving a request to perform an operation on a data item in the database
3 system;

4 if the data item is a sensitive data item containing sensitive information
5 and if the request is received from a sensitive user who is empowered to access
6 sensitive data, allowing the operation to proceed if the sensitive user has access
7 rights to the sensitive data item; and
8 if the data item is a sensitive data item and the request is received from a
9 user who is not a sensitive user, disallowing the operation.

1 51. (Original) The method of claim 50, wherein if the data item is a
2 sensitive data item, if the operation is allowed to proceed, and if the operation
3 involves retrieval of the data item, the method further comprises decrypting the
4 data item using an encryption key after the data item is retrieved.

1 52. (Original) The method of claim 51, wherein the encryption key is
2 stored along with a table containing the data item.

1 53. (Original) The method of claim 52, wherein the encryption key is
2 stored in encrypted form.

1 54. (Original) The method of claim 49, wherein if the user is not a
2 sensitive user, and if the command to perform the administrative function is
3 received from a security officer, the method further comprises allowing the
4 security officer to perform the administrative function on the user.

1 55. (Currently amended) A computer-readable storage medium storing
2 instructions that when executed by a computer cause the computer to perform a
3 method for managing a database system, the method comprising:

4 receiving a command to perform an administrative function involving a
5 user within the database system;
6 determining if the user is a sensitive user who is empowered to access
7 sensitive data in the database system;
8 if the user is not a sensitive user, and if the command is received from a
9 normal database administrator for the database system, allowing the
10 administrative function to proceed;
11 if the user is a sensitive user, and if the command is received from a
12 normal database administrator, disallowing preventing the normal database
13 administrator from performing the administrative function involving the sensitive
14 user; and
15 if the user is a sensitive user, and if the command is received from a
16 security officer who is the only database administrator empowered to perform
17 administrative functions for functions involving sensitive users, allowing
18 performing the administrative function to proceed.

1 56. (Original) The computer-readable storage medium of claim 55,
2 wherein the method further comprises:
3 receiving a request to perform an operation on a data item in the database
4 system;
5 if the data item is a sensitive data item containing sensitive information
6 and if the request is received from a sensitive user who is empowered to access
7 sensitive data, allowing the operation to proceed if the sensitive user has access
8 rights to the sensitive data item; and
9 if the data item is a sensitive data item and the request is received from a
10 user who is not a sensitive user, disallowing the operation.

1 57. (Original) The computer-readable storage medium of claim 56,
2 wherein if the data item is a sensitive data item, if the operation is allowed to
3 proceed, and if the operation involves retrieval of the data item, the method
4 further comprises decrypting the data item using an encryption key after the data
5 item is retrieved.

1 58. (Original) The computer-readable storage medium of claim 57,
2 wherein the encryption key is stored along with a table containing the data item.

1 59. (Original) The computer-readable storage medium of claim 58,
2 wherein the encryption key is stored in encrypted form.

1 60. (Original) The computer-readable storage medium of claim 55,
2 wherein if the user is not a sensitive user, and if the command to perform the
3 administrative function is received from a security officer, the method further
4 comprises allowing the security officer to perform the administrative function on
5 the user.

1 61. (Currently amended) An apparatus that manages a database system,
2 comprising:
3 a command-receiving mechanism configured to receive a command to
4 perform an administrative function involving a user within the database system;
5 an execution mechanism configured to,
6 determine if the user is a sensitive user who is empowered
7 to access sensitive data in the database system;

8 allow the administrative function to proceed, if the user is
9 not a sensitive user, and if the command is received from a normal
10 database administrator for the database system;
11 ~~disallow~~ prevent a normal database administrator from
12 performing the administrative function involving the sensitive user,
13 if the user is a sensitive user, and if the command is received ~~from~~
14 from the normal database administrator; and to
15 allow the administrative function to proceed, if the user is a
16 sensitive user, and if the command is received from a security
17 officer who is the only database administrator empowered to
18 perform administrative ~~functions for~~ functions involving sensitive
19 users.

1 62. (Currently amended) The apparatus of ~~claim 17~~ claim 61,
2 wherein the command-receiving mechanism is configured to receive a
3 request to perform an operation on a data item in the database system;
4 wherein the execution mechanism is configured to,
5 allow the operation to proceed, if the data item is a
6 sensitive data item containing sensitive information and if the
7 request is received from a sensitive user who is empowered to
8 access sensitive data, and if the sensitive user has access rights to
9 the sensitive data item; and to
10 disallowing the operation, if the data item is a sensitive data
11 item, and the request is received from a user who is not a sensitive
12 user.

1 | 63. (Currently amended) The apparatus of ~~claim 18~~ claim 62, further
2 | comprising a decryption mechanism, wherein if the data item is a sensitive data
3 | item, if the operation is allowed to proceed, and if the operation involves retrieval
4 | of the data item, the decryption mechanism is configured to decrypt the data item
5 | using an encryption key after the data item is retrieved

1 | 64. (Currently amended) The apparatus of ~~claim 19~~ claim 63, wherein
2 | the encryption key is stored along with a table containing the data item.

1 | 65. (Currently amended) The apparatus of ~~claim 20~~ claim 64, wherein
2 | the encryption key is stored in encrypted form.

1 | 66. (Currently amended) The apparatus of ~~claim 17~~ claim 61, wherein
2 | if the user is not a sensitive user, and if the command to perform the
3 | administrative function is received from a security officer, the execution
4 | mechanism is configured to allow the security officer to perform the
5 | administrative function on the user.